

What is claimed:

1. Device for the reading-out and/or testing of matrices or optical storage media that have been set in rotation, with an opto-electronic scanning system, an electronic control device
5 for the opto-electronic scanning system, an amplifier device for the amplification of the HF signals originating in the opto-electronic scanning system, a decoder device for the decoding of amplified HF signals, and an optionally present signal-processing device for the processing of amplified HF signals for a measurement and evaluation device, wherein at least the amplifier device that is able to be releasably connected to the opto-electronic scanning system and the
10 decoder device are configured as separate modules which are able to be releasably connected to each other.
2. Device according to claim 1, wherein the electronic control device for the opto-electronic scanning system is arranged on the module that includes the amplifier device.
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3. Device according to claim 1, wherein the electronic control device for the opto-electronic scanning system is arranged on the module that includes the decoder device.
4. Device according to claim 1, wherein the amplifier device, the decoder device and
20 the signal-processing device are each configured as separate modules.
5. Device according to claim 4, wherein the module of the amplifier device includes at least a first terminal for the opto-electronic scanning system, at least a second terminal for the decoder device and a third terminal for the signal-processing device.
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6. Device according to claim 1, wherein a further module with a processor device is provided, which is able to be releasably connected to at least one of the modules of the decoder device or the signal-processing device.
7. Device according to claim 6, wherein the processor module includes a terminal
30 for the decoder device and a terminal for the signal-processing device.

8. Device according to claim 6, wherein the module of the amplifier device is releasably connected to the module of the decoder device on the one hand and to the module of the signal-processing device on the other and the module of the processor device is likewise
5 connected to the module of the decoder device and to the module of the signal-processing device.

9. Device according to claim 1, wherein the modules include at least partly flexible programmable interface devices, preferably field programmable gate arrays (FPGAs) for communication with other modules.

10. Device according to claim 1, wherein the module of the amplifier device includes two amplifiers, the outlet of one amplifier leading to the terminal for the signal-processing device and the outlet of the other amplifier to the terminal for the decoder device.

11. Device according to claim 1, wherein the module of the amplifier device includes a continuous signal bridge between two terminals, the first terminal being provided for the decoder device and the second terminal for the signal-processing device.

12. Device according to claim 1, wherein the decoder device includes a plug-in
20 decoder chip held releasable in a mount.

13. Device according to claim 1, wherein the decoder device includes a real-time-capable microcontroller which is in communication with the actual decoder, and preferably also with the control device, the processor device and via the signal bridge of the module of the
25 amplifier device with the signal-processing device.

14. Device according to claim 1, wherein the processor module includes a LAN interface, in particular an Ethernet interface.

15. Device according to claim 1, wherein the signal-processing device includes several parallel analog-to-digital converters, the outputs of which are fed to a freely programmable interface device, preferably a field programmable gate array (FPGA).

5 16. Device according to claim 1, wherein the signal-processing device includes at least a terminal for the releasable connection of an external measuring card.

17. Device according to claim 1, wherein the modules are at least partly designed as assembled printed circuit boards.

10 18. Device according to claim 17, wherein the assembled printed circuit boards are able to be releasably connected to a common mount, preferably a metal frame.

15 19. Device for the reading-out and/or testing of matrices or optical storage media that have been set in rotation, with an opto-electronic scanning system, an electronic control device for the opto-electronic scanning system, an amplifier device for the amplification of the HF signals originating in the opto-electronic scanning system, a decoder device for the decoding of amplified HF signals, and an optionally present signal-processing device for the processing of amplified HF signals for a measurement and evaluation device, wherein the electronic
20 components are arranged on printed circuit boards and the printed circuit boards are arranged at a right angle to each other.

20. Device according to claim 19, wherein the printed circuit boards comprise the printed circuit board of the module of the amplifier device, the printed circuit board of the
25 module of the decoder device, the printed circuit board of the module of the processor device and the printed circuit board of the signal-processing device.

21. Device according to claim 19, wherein the printed circuit boards are arranged essentially along the sides of an imaginary rectangular prism or a cube (Fig. 4).

22. Device according to claim 20, wherein the printed circuit board of the module of the amplifier device is arranged in the area of the top surface of the imaginary rectangular prism or cube, in that the printed circuit board of the module of the processor device is arranged at the front or rear side of the imaginary rectangular prism or cube, and in that the printed circuit
5 boards of the modules of the signal-processing device and of the decoder device are arranged at the side surfaces of the imaginary rectangular prism, preferably cube, or form these (Fig. 4).

23. Device according to claim 1, wherein the opto-electronic scanning system is arranged above the printed circuit board of the module of the amplifier device at a common
10 mount for all the printed circuit boards of the modules (Fig. 4).